

REMARKS

1. In paragraph 4 of the Office Action the Examiner has relied on DeLorme et al (US 6,321,158) as a basis for a 35 USC 103(a) obviousness objection against the claimed invention. The Applicant notes that DeLorme was not granted (and was therefore not publicly available) until 20 November 2001, well after the priority date (25 October 1999) and the US filing date (20 October 2000) of the present application. A person having ordinary skill in the art, at the time the invention was made, would not have had access to DeLorme and would therefore not have been able to combine its disclosure with that of Heuwieser et al (US 4,668,858) and Lima (US 5,406,491). As such, the Applicant submits that DeLorme does not form part of the prior art for the purposes of assessing the obviousness of the claimed invention and requests that this 103(a) objection be withdrawn.

2. In any event, the applicant has amended independent claims 1 and 3 to more clearly distinguish the claimed invention from the cited prior art. The amended claims may be distinguished over the prior art for the following reason:

Claims 1 and 3 have been narrowed to specify that the sensing device performs the step of: "*sensing at least some of the coded data in the vicinity of a particular geographic location*" (emphasis added), the particular geographic location being used as "*at least one of: a starting point of the route, a way-point of the route, and a destination of the route.*" In the Lima arrangement, any sensing of coded data is not done in the vicinity of a geographic location that forms part of the route. As seen in Figure 1 of Lima, the barcodes 13A and 13B store information about reference points A and B (See col. 5, lines 1-46). These reference points are used to help the system determine where the light pen is on the map when the light pen is actually used to trace out the route between particular geographic locations (such as locations C and D in Figure 1). Neither the Lima bar code reader nor the Lima light pen are adapted to sense coded data in the vicinity of geographic locations C and D and to identify those particular geographic locations from the sensed coded data. They are only used to sense coded data in the vicinity of reference points A and B and that coded data only provides information about the reference points, not about the particular geographic locations along the route being planned.

Accordingly, DeLorme, when combined with Lima does not disclose the invention as claimed in claims 1 and 3.

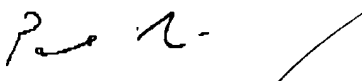
3. Since DeLorme does not form part of the prior art for assessing the obviousness of the claimed invention and since, even if it did, the amended claims are not anticipated by DeLorme in view of Heuwieser and Lima, the Applicant requests that the Examiner reconsider this obviousness objection.

CONCLUSION

It is respectfully submitted that all of the Examiner's objections have been successfully traversed. Accordingly, it is submitted that the application is now in condition for allowance. Reconsideration and allowance of the application is courteously solicited.

Very respectfully,

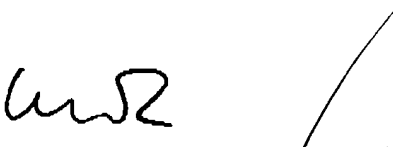
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VERSION WITH MARKINGS TO SHOW CHANGES MADE**In the Specification:****The section beginning at page 1, lines 9-15 to be amended as follows:**

~~NPA011US, NPA031US, NPA040US, NPA046US, NPA053US, NPA059US,
 NPA064US, NPB006US, NPS004US, NPS008US, NPS013US, NPS024US,
 NPPC1, UP01US, UP02US, UP03US, UP04US, UP05US~~

~~The disclosures of these co-pending applications are incorporated herein by cross-reference.
 Each application is temporarily identified by its docket number. This will be replaced by the
 corresponding USSN when available.~~

--09/693.415,	09/693.219,	09/693.280,	09/693.515,
09/693.705,	09/693.647,	09/693.690,	09/693.593,
09/693.216,	09/693.341,	09/696.473,	09/696.514,
09/693.301,	09/693.388,	09/693.704,	09/693.510,
09/693.336,	09/693.335		

~~The disclosures of these co-pending applications are incorporated herein by reference.--~~

The section beginning at page 1, lines 19-23 to be amended as follows:

~~NPA024US, NPA025US, NPA047US, NPA049US~~

~~The disclosures of these co-pending applications are incorporated herein by cross-reference.
 Each application is temporarily identified by its docket number. This will be replaced by the
 corresponding USSN when available.~~

--09/663.579,	09/669.599,	09/663.701,	09/663.640,
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~~The disclosures of these co-pending applications are incorporated herein by reference.--~~

The section beginning at page 1, lines 27-33 to be amended as follows:

~~NPA014US, NPA015US, NPA022US, NPA026US, NPA038US, NPA041US,
 NPA050US, NPA051US, NPA052US, NPA063US, NPA065US, NPA067US,
 NPA068US, NPA069US, NPA071US, NPA072US, NPB003US, NPB004US,
 NPB005US, NPP019US, PEC04US, PEC05US, PEC06US, PEC07US~~

~~The disclosures of these co-pending applications are incorporated herein by cross-reference.
 Each application is temporarily identified by its docket number. This will be replaced by the
 corresponding USSN when available.~~

--09/609.139,	09/608.970,	09/609.039,	09/607.852,
09/607.656,	09/609.132,	09/609.303,	09/610.095,
09/609.596,	09/607.843,	09/607.605,	09/608.178,
09/609.553,	09/609.233,	09/609.149,	09/608.022,
09/609.232,	09/607.844,	09/607.657,	09/608.920,

09/607,985, 09/607,990, 09/607,196, 09/606,999

The disclosures of these co-pending applications are incorporated herein by reference.--

The section beginning at page 2, lines 4-20 to be amended as follows:

~~NPA001US, NPA002US, NPA004US, NPA005US, NPA006US, NPA007US,
NPA008US, NPA009US, NPA010US, NPA012US, NPA016US, NPA017US,
NPA018US, NPA019US, NPA020US, NPA021US, NPA030US, NPA035US,
NPA048US, NPA075US, NPB001US, NPB002US, NPK002US, NPK003US,
NPK004US, NPK005US, NPM001US, NPM002US, NPM003US, NPM004US,
NPN001US, NPP001US, NPP003US, NPP005US, NPP006US, NPP007US,
NPP008US, NPP016US, NPP017US, NPP018US, NPS001US, NPS003US,
NPS020US, NPT001US, NPT002US, NPT003US, NPT004US, NPX001US,
NPX003US, NPX008US, NPX011US, NPX014US, NPX016US, U52US,
UJ52US, MJ10US, MJ11US, MJ12US, MJ13US, MJ14US,
MJ15US, MJ34US, MJ47US, MJ58US, MJ62US, MJ63US,
PAK04US, PAK05US, PAK06US, PAK07US, PAK08US, PEC01US,
PEC02US, PEC03US~~

~~The disclosures of these co-pending applications are incorporated herein by cross reference.~~

~~Each application is temporarily identified by its docket number. This will be replaced by the corresponding USSN when available.~~

09/575,197,	09/575,195,	09/575,159,	09/575,132,
09/575,123,	09/575,148,	09/575,130,	09/575,165,
09/575,153,	09/575,118,	09/575,131,	09/575,116,
09/575,144,	09/575,139,	09/575,186,	09/575,185,
09/575,191,	09/575,145,	09/575,192,	09/575,181,
09/575,193,	09/575,156,	09/575,183,	09/575,160,
09/575,150,	09/575,169,	09/575,184,	09/575,128,
09/575,180,	09/575,149,	09/575,179,	09/575,187,
09/575,155,	09/575,133,	09/575,143,	09/575,196,
09/575,198,	09/575,178,	09/575,164,	09/575,146,
09/575,174,	09/575,163,	09/575,168,	09/575,154,
09/575,129,	09/575,124,	09/575,188,	09/575,189,
09/575,162,	09/575,172,	09/575,170,	09/575,171,
09/575,161,	09/575,141,	09/575,125,	09/575,142,
09/575,140,	09/575,190,	09/575,138,	09/575,126,
09/575,127,	09/575,158,	09/575,117,	09/575,147,
09/575,152,	09/575,176,	09/575,115,	09/575,114,
09/575,113,	09/575,112,	09/575,111,	09/575,108,
09/575,109,	09/575,110		

The disclosures of these co-pending applications are incorporated herein by reference.--

The section beginning at page 7, lines 3-13 to be amended as follows:

~~In the preferred embodiment, the invention is configured to work with the netpage networked computer system, a summary of which is given below and a detailed description of which is given in our earlier applications, including in particular applications USSN 09/_____ (docket no. NPT002US), USSN 09/_____ (docket no. NPS001US),~~

USSN 09/_____ (docket no. NPP003US), USSN 09/_____ (docket no. NPA002US) and USSN 09/_____ (docket no. I52US). It will be appreciated that not every implementation will necessarily embody all or even most of the specific details and extensions described in these applications in relation to the basic system. However, the system is described in its most complete form to assist in understanding the context in which the preferred embodiments and aspects of the present invention operate.

In the preferred embodiment, the invention is configured to work with the netpage networked computer system, a summary of which is given below and a detailed description of which is given in our earlier applications, including in particular applications USSN 09/575,129, USSN 09/575,174, USSN 09/575,155, USSN 09/575,195, and USSN 09/575,141. It will be appreciated that not every implementation will necessarily embody all or even most of the specific details and extensions described in these applications in relation to the basic system. However, the system is described in its most complete form to assist in understanding the context in which the preferred embodiments and aspects of the present invention operate.

The section beginning at page 8, lines 18-31 to be amended as follows:

As illustrated in Figure 2, the netpage pen 101, a preferred form of which is described in our earlier application USSN 09/_____ (docket no. NPS001US), works in conjunction with a netpage printer 601, an Internet-connected printing appliance for home, office or mobile use. The pen is wireless and communicates securely with the netpage printer via a short range radio link 9.

The netpage printer 601, preferred forms of which are described in our earlier application USSN 09/_____ (docket no. NPP003US) and our co filed application USSN 09/_____ (docket no. NPS024US), is able to deliver, periodically or on demand, personalized newspapers, magazines, catalogs, brochures and other publications, all printed at high quality as interactive netpages. Unlike a personal computer, the netpage printer is an appliance which can be, for example, wall-mounted adjacent to an area where the morning news is first consumed, such as in a user's kitchen, near a breakfast table, or near the household's point of departure for the day. It also comes in tabletop, desktop, portable and miniature versions.

As illustrated in Figure 2, the netpage pen 101, a preferred form of which is described in our earlier application USSN 09/575,174, works in conjunction with a netpage printer 601, an Internet-connected printing appliance for home, office or mobile use. The pen is wireless and communicates securely with the netpage printer via a short-range radio

link 9.

The netpage printer 601, preferred forms of which are described in our earlier application USSN 09/575,155 and our co-filed application USSN 09/693,514, is able to deliver, periodically or on demand, personalized newspapers, magazines, catalogs, brochures and other publications, all printed at high quality as interactive netpages. Unlike a personal computer, the netpage printer is an appliance which can be, for example, wall-mounted adjacent to an area where the morning news is first consumed, such as in a user's kitchen, near a breakfast table, or near the household's point of departure for the day. It also comes in tabletop, desktop, portable and miniature versions.

The section beginning at page 9, lines 10-17 to be amended as follows:

~~The netpage system is made considerably more convenient in the preferred embodiment by being used in conjunction with high-speed microelectromechanical system (MEMS) based inkjet (Memjet™) printers, for example as described in our earlier application USSN 09/_____ (docket no. IJ52US). In the preferred form of this technology, relatively high speed and high quality printing is made more affordable to consumers. In its preferred form, a netpage publication has the physical characteristics of a traditional newsmagazine, such as a set of letter size glossy pages printed in full color on both sides, bound together for easy navigation and comfortable handling.~~

The netpage system is made considerably more convenient in the preferred embodiment by being used in conjunction with high-speed microelectromechanical system (MEMS) based inkjet (Memjet™) printers, for example as described in our earlier application USSN 09/575,141. In the preferred form of this technology, relatively high-speed and high-quality printing is made more affordable to consumers. In its preferred form, a netpage publication has the physical characteristics of a traditional newsmagazine, such as a set of letter-size glossy pages printed in full color on both sides, bound together for easy navigation and comfortable handling.

The section beginning at page 13, lines 28-31 through to page 2, lines 1-11 to be amended as follows:

~~One embodiment of the physical representation of the tag, shown in Figure 4a and described in our earlier application USSN 09/_____ (docket no. NPT002US), includes fixed target structures 15, 16, 17 and variable data areas 18. The fixed target structures allow a sensing device such as the netpage pen to detect the tag and infer its three dimensional orientation relative to the sensor. The data areas contain representations of the individual bits of the encoded tag data. To maximise its size, each data bit is represented by a radial~~

wedge in the form of an area bounded by two radial lines and two concentric circular arcs. Each wedge has a minimum dimension of 8 dots at 1600 dpi and is designed so that its base (its inner arc), is at least equal to this minimum dimension. The height of the wedge in the radial direction is always equal to the minimum dimension. Each 4-bit data symbol is represented by an array of 2x2 wedges. The fifteen 4-bit data symbols of each of the six codewords are allocated to the four concentric symbol rings 18a to 18d in interleaved fashion. Symbols are allocated alternately in circular progression around the tag. The interleaving is designed to maximise the average spatial distance between any two symbols of the same codeword.

One embodiment of the physical representation of the tag, shown in Figure 4a and described in our earlier application USSN 09/575,129, includes fixed target structures 15, 16, 17 and variable data areas 18. The fixed target structures allow a sensing device such as the netpage pen to detect the tag and infer its three-dimensional orientation relative to the sensor. The data areas contain representations of the individual bits of the encoded tag data. To maximise its size, each data bit is represented by a radial wedge in the form of an area bounded by two radial lines and two concentric circular arcs. Each wedge has a minimum dimension of 8 dots at 1600 dpi and is designed so that its base (its inner arc), is at least equal to this minimum dimension. The height of the wedge in the radial direction is always equal to the minimum dimension. Each 4-bit data symbol is represented by an array of 2x2 wedges. The fifteen 4-bit data symbols of each of the six codewords are allocated to the four concentric symbol rings 18a to 18d in interleaved fashion. Symbols are allocated alternately in circular progression around the tag. The interleaving is designed to maximise the average spatial distance between any two symbols of the same codeword.

The section beginning at page 17, lines 2-12 to be amended as follows:

~~An object-indicating (or function-indicating) tag contains a tag ID which directly identifies a user interface element in the page description associated with the region (or equivalently, a function). All the tags in the zone of the user interface element identify the user interface element, making them all identical and therefore indistinguishable. Object-indicating tags do not, therefore, support the capture of an absolute pen path. They do, however, support the capture of a relative pen path. So long as the position sampling frequency exceeds twice the encountered tag frequency, the displacement from one sampled pen position to the next within a stroke can be unambiguously determined. As an alternative, the netpage pen 101 can contain a pair or motion-sensing accelerometers, as described in our earlier application USSN 09/_____ (docket no. NPS001US).~~

An object-indicating (or function-indicating) tag contains a tag ID which directly identifies a user interface element in the page description associated with the region (or equivalently, a function). All the tags in the zone of the user interface element identify the user interface element, making them all identical and therefore indistinguishable. Object-indicating tags do not, therefore, support the capture of an absolute pen path. They do, however, support the capture of a relative pen path. So long as the position sampling frequency exceeds twice the encountered tag frequency, the displacement from one sampled pen position to the next within a stroke can be unambiguously determined. As an alternative, the netpage pen 101 can contain a pair of motion-sensing accelerometers, as described in our earlier application USSN 09/575,174.

The section beginning at page 19, lines 21-26 to be amended as follows:

~~When a geographically-oriented netpage application determines that a user has selected a geographic location, it stores the selected location (or area) on the clipboard of both the user and the printer through which the user is interacting. This is then available for retrieval by other geographically-oriented applications, including the netpage route planning application. Further details of the clipboard are described in our co-filed application USSN 09/_____ (docket no. NPA053US).~~

When a geographically-oriented netpage application determines that a user has selected a geographic location, it stores the selected location (or area) on the clipboard of both the user and the printer through which the user is interacting. This is then available for retrieval by other geographically-oriented applications, including the netpage route planning application. Further details of the clipboard are described in our co-filed application USSN 09/693,705.

The section beginning at page 21, lines 8-15 to be amended as follows:

~~The Trip Origin page 520 is shown in Figure 15. The user can specify a point of origin for the trip in one of several ways. The user can click on a point on a netpage map and then click the <Last Selected Location> button 526 on the Trip Origin page 520. Printing maps and selecting geographic locations via printed netpage maps is described in more detail in our co-filed application USSN 09/_____ (docket no. NPA053US). The user also can press the <Location> button on an advertisement or on someone's business card and then press the <Last Selected Location> button 526. This yields a potentially more accurate location than one derived from a map.~~

The Trip Origin page 520 is shown in Figure 15. The user can specify a point of

origin for the trip in one of several ways. The user can click on a point on a netpage map and then click the <Last Selected Location> button 526 on the Trip Origin page 520. Printing maps and selecting geographic locations via printed netpage maps is described in more detail in our co-filed application USSN 09/693,705. The user also can press the <Location> button on an advertisement or on someone's business card and then press the <Last Selected Location> button 526. This yields a potentially more accurate location than one derived from a map.

In the Claims:

Claims 1 and 3 have been amended as follows:

1. (Amended) A method of enabling a user to plan a route using a computer system, the method including the steps of:

printing a map of a geographic area, the map including a plurality of geographic locations and coded data indicative of an identity of the map and of a plurality of reference points of the map;

receiving, in the computer system, indicating data from a sensing device operated by the user, the indicating data regarding the identity of the map and a position of the sensing device relative to the map, the sensing device, when placed in an operative position relative to the map, sensing the ~~indicating data using~~ at least some of the coded data in the vicinity of a particular geographic location and generating the indicating data using at least some of the sensed coded data;

identifying, in the computer system and from the indicating data, ~~at least one~~ the particular geographic location; and

planning the route, in the computer system, using the ~~at least one~~ particular geographic location as at least one of: ~~the a route-starting point of the route~~, a route-way-point of the route, and ~~the a route-destination of the route~~.

3. (Amended) A system for enabling a user to plan a route, the system including:

a map of a geographic area, the map including a plurality of geographic locations and coded data indicative of an identity of the map and of a plurality of reference points of the map;

a printer for printing the map, including the coded data, on demand; and

a computer system for receiving indicating data from a sensing device operated by

the user, the indicating data regarding the identity of the map and a position of the sensing device relative to the map, the sensing device, when placed in an operative position relative to the map, sensing ~~the indicating data using at least some of the coded data in the vicinity of~~ a particular geographic location and generating the indicating data using at least some of the sensed coded data;

wherein the computer system is configured to identify, from the indicating data, ~~at least one~~ the particular geographic location, and to plan the route using the ~~at least one particular~~ geographic location as at least one of: ~~the a route-starting point of the route, an a route-way-~~ point of the route, and the a route-destination of the route.